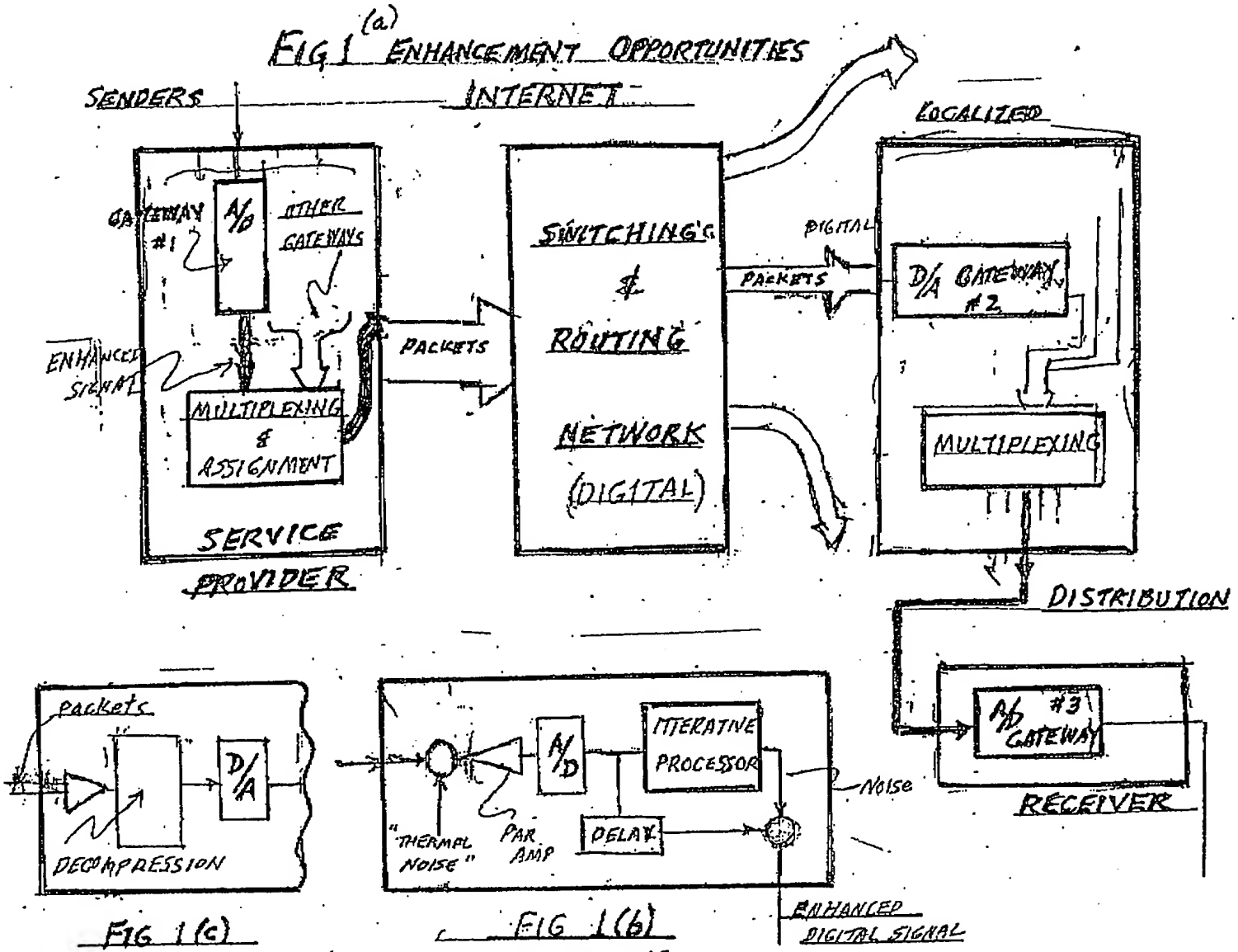
000260 0999960



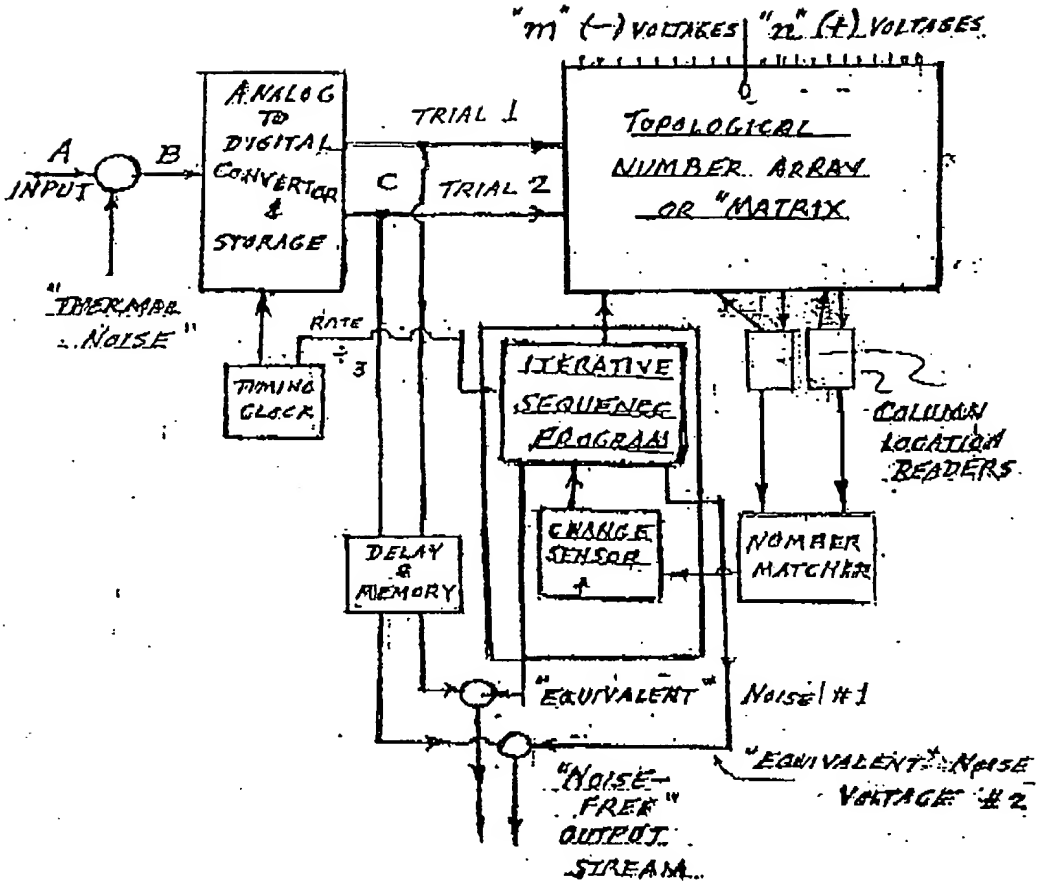


FIG 2 BLOCK DIAGRAM

OPTION 1

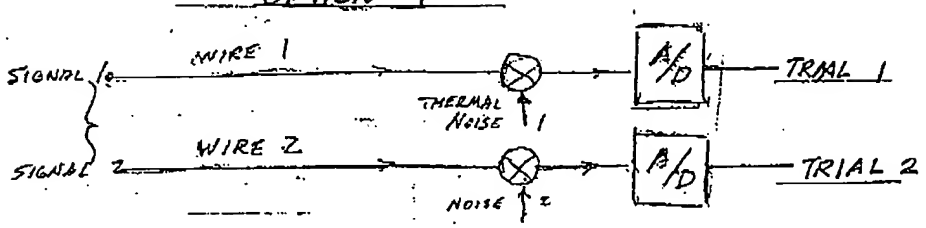


FIG 3 (a) 2-WIRE ("SAME" SIGNAL - 2 NOISES

OPTION 2

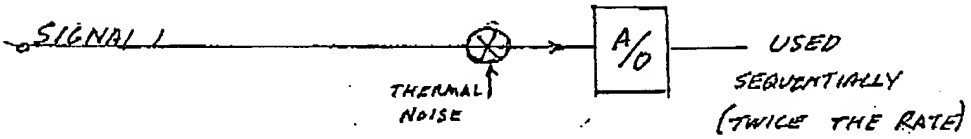


FIG 3 (b) 1 WIRE SEQUENTIALLY ---- SACRIFICES 3 db

OPTION 3

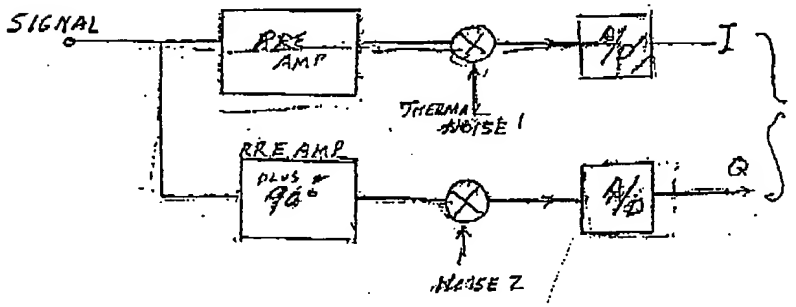


FIG 3 (c) 1 WIRE USING IN PHASE I AND QUADRATURE Q

FIG 3 CONNECTION OPTIONS

I data ==== Group 1 ### Noise averages ### *** Avg scanned in opposite sense ***

Bin IA	-.9 v	-.85 v	-.8 v	-.75 v	-.7 v	-.65 v	-.6 v	-.55 v	-.5 v	-.45 v	-.4 v	-.35 v	-.3 v	-.25 v	-.2 v	-.15 v	-.1 v
Avg	1.206	1.156	1.106	1.056	1.006	0.956	0.906	0.856	0.806	0.756	0.706	0.656	0.606	0.556	0.506	0.456	0.406
200 0.041	-0.559	-0.509	-0.459	-0.409	-0.359	-0.309	-0.259	-0.209	-0.159	-0.109	-0.059	-0.009	0.041	0.091	0.141	0.191	0.241
Avg	-0.631	0.641	0.591	0.541	0.491	0.441	0.391	0.341	0.291	0.241	0.191	0.141	0.091	0.041	-0.009	-0.059	-0.109
21A -0.052	-1.161	-1.111	-1.061	-1.011	-0.961	-0.911	-0.861	-0.811	-0.761	-0.711	-0.661	-0.611	-0.561	-0.511	-0.461	-0.411	-0.361
Avg	0.735	0.685	0.635	0.585	0.535	0.485	0.435	0.385	0.335	0.285	0.235	0.185	0.135	0.085	0.035	-0.015	-0.065
22A 0.040	-1.005	-0.955	-0.905	-0.855	-0.805	-0.755	-0.705	-0.655	-0.605	-0.555	-0.505	-0.455	-0.405	-0.355	-0.305	-0.255	-0.205
Avg	0.654	0.604	0.554	0.504	0.454	0.404	0.354	0.304	0.254	0.204	0.154	0.104	0.054	0.004	-0.046	-0.096	-0.146
23A 0.022	-1.124	-1.074	-1.024	-0.974	-0.924	-0.874	-0.824	-0.774	-0.724	-0.674	-0.624	-0.574	-0.524	-0.474	-0.424	-0.374	-0.324
Avg	1.166	1.116	1.066	1.016	0.966	0.916	0.866	0.816	0.766	0.716	0.666	0.616	0.566	0.516	0.466	0.416	0.366
24A -0.002	-0.637	-0.587	-0.537	-0.487	-0.437	-0.387	-0.337	-0.287	-0.237	-0.187	-0.137	-0.087	-0.037	0.013	0.063	0.113	0.163
Avg	1.100	1.050	1.000	0.950	0.900	0.850	0.800	0.750	0.700	0.650	0.600	0.550	0.500	0.450	0.400	0.350	0.300
25B -0.032	-0.732	-0.682	-0.632	-0.582	-0.532	-0.482	-0.432	-0.382	-0.332	-0.282	-0.232	-0.182	-0.132	-0.082	-0.032	0.018	0.068
Avg	0.467	0.417	0.367	0.317	0.267	0.217	0.167	0.117	0.067	0.017	-0.033	-0.083	-0.133	-0.183	-0.233	-0.283	-0.333
26B -0.163	-1.491	-1.441	-1.391	-1.341	-1.291	-1.241	-1.191	-1.141	-1.091	-1.041	-0.991	-0.941	-0.891	-0.841	-0.791	-0.741	-0.691
Avg	0.924	0.874	0.824	0.774	0.724	0.674	0.624	0.574	0.524	0.474	0.424	0.374	0.324	0.274	0.224	0.174	0.124
27A -0.120	-0.756	-0.706	-0.656	-0.606	-0.556	-0.506	-0.456	-0.406	-0.356	-0.306	-0.256	-0.206	-0.156	-0.106	-0.056	-0.006	0.044
Avg	0.782	0.732	0.682	0.632	0.582	0.532	0.482	0.432	0.382	0.332	0.282	0.232	0.182	0.132	0.082	0.032	-0.018
29C -0.176	-0.840	-0.790	-0.740	-0.690	-0.640	-0.590	-0.540	-0.490	-0.440	-0.390	-0.340	-0.290	-0.240	-0.190	-0.140	-0.090	-0.040
Avg	1.246	1.196	1.146	1.096	1.046	0.996	0.946	0.896	0.846	0.796	0.746	0.696	0.646	0.596	0.546	0.496	0.446
30C -0.129	-0.683	-0.633	-0.583	-0.533	-0.483	-0.433	-0.383	-0.333	-0.283	-0.233	-0.183	-0.133	-0.083	-0.033	0.017	0.067	0.117
Avg	0.848	0.798	0.748	0.698	0.648	0.598	0.548	0.498	0.448	0.398	0.348	0.298	0.248	0.198	0.148	0.098	0.048
308 0.032	-0.921	-0.871	-0.821	-0.771	-0.721	-0.671	-0.621	-0.571	-0.521	-0.471	-0.421	-0.371	-0.321	-0.271	-0.221	-0.171	-0.121
Avg	0.786	0.736	0.686	0.636	0.586	0.536	0.486	0.436	0.386	0.336	0.286	0.236	0.186	0.136	0.086	0.036	-0.014
31C -0.174	-1.187	-1.137	-1.087	-1.037	-0.987	-0.937	-0.887	-0.837	-0.787	-0.737	-0.687	-0.637	-0.587	-0.537	-0.487	-0.437	-0.387
Avg	1.060	1.010	0.960	0.910	0.860	0.810	0.760	0.710	0.660	0.610	0.560	0.510	0.460	0.410	0.360	0.310	0.260
32C -0.015	-0.755	-0.705	-0.655	-0.605	-0.555	-0.505	-0.455	-0.405	-0.355	-0.305	-0.255	-0.205	-0.155	-0.105	-0.055	-0.005	0.045
Avg	0.393	0.343	0.293	0.243	0.193	0.143	0.093	0.043	-0.007	-0.057	-0.107	-0.157	-0.207	-0.257	-0.307	-0.357	-0.407
33C -0.050	-0.687	-0.637	-0.587	-0.537	-0.487	-0.437	-0.387	-0.337	-0.287	-0.237	-0.187	-0.137	-0.087	-0.037	0.013	0.063	0.113
Avg	0.530	0.480	0.430	0.380	0.330	0.280	0.230	0.180	0.130	0.080	0.030	-0.020	-0.070	-0.120	-0.170	-0.220	-0.270
34A -0.203	-1.479	-1.429	-1.379	-1.329	-1.279	-1.229	-1.179	-1.129	-1.079	-1.029	-0.979	-0.929	-0.879	-0.829	-0.779	-0.729	-0.679
Avg	1.035	0.985	0.935	0.885	0.835	0.785	0.735	0.685	0.635	0.585	0.535	0.485	0.435	0.385	0.335	0.285	0.235
35C -0.099	-0.649	-0.599	-0.549	-0.499	-0.449	-0.399	-0.349	-0.299	-0.249	-0.199	-0.149	-0.099	-0.049	0.001	0.051	0.101	0.151
Avg	1.171	1.121	1.071	1.021	0.971	0.921	0.871	0.821	0.771	0.721	0.671	0.621	0.571	0.521	0.471	0.421	0.371
36B -0.213	-0.841	-0.791	-0.741	-0.691	-0.641	-0.591	-0.541	-0.491	-0.441	-0.391	-0.341	-0.291	-0.241	-0.191	-0.141	-0.091	-0.041
Avg	1.024	0.974	0.924	0.874	0.824	0.774	0.724	0.674	0.624	0.574	0.524	0.474	0.424	0.374	0.324	0.274	0.224
37C 0.015	-0.761	-0.711	-0.661	-0.611	-0.561	-0.511	-0.461	-0.411	-0.361	-0.311	-0.261	-0.211	-0.161	-0.111	-0.061	-0.011	0.039
Avg	0.616	0.566	0.516	0.466	0.416	0.366	0.316	0.266	0.216	0.166	0.116	0.066	0.016	-0.034	-0.084	-0.134	-0.184
38C 0.003	-1.191	-1.141	-1.091	-1.041	-0.991	-0.941	-0.891	-0.841	-0.791	-0.741	-0.691	-0.641	-0.591	-0.541	-0.491	-0.441	-0.391

FIG 4(a)

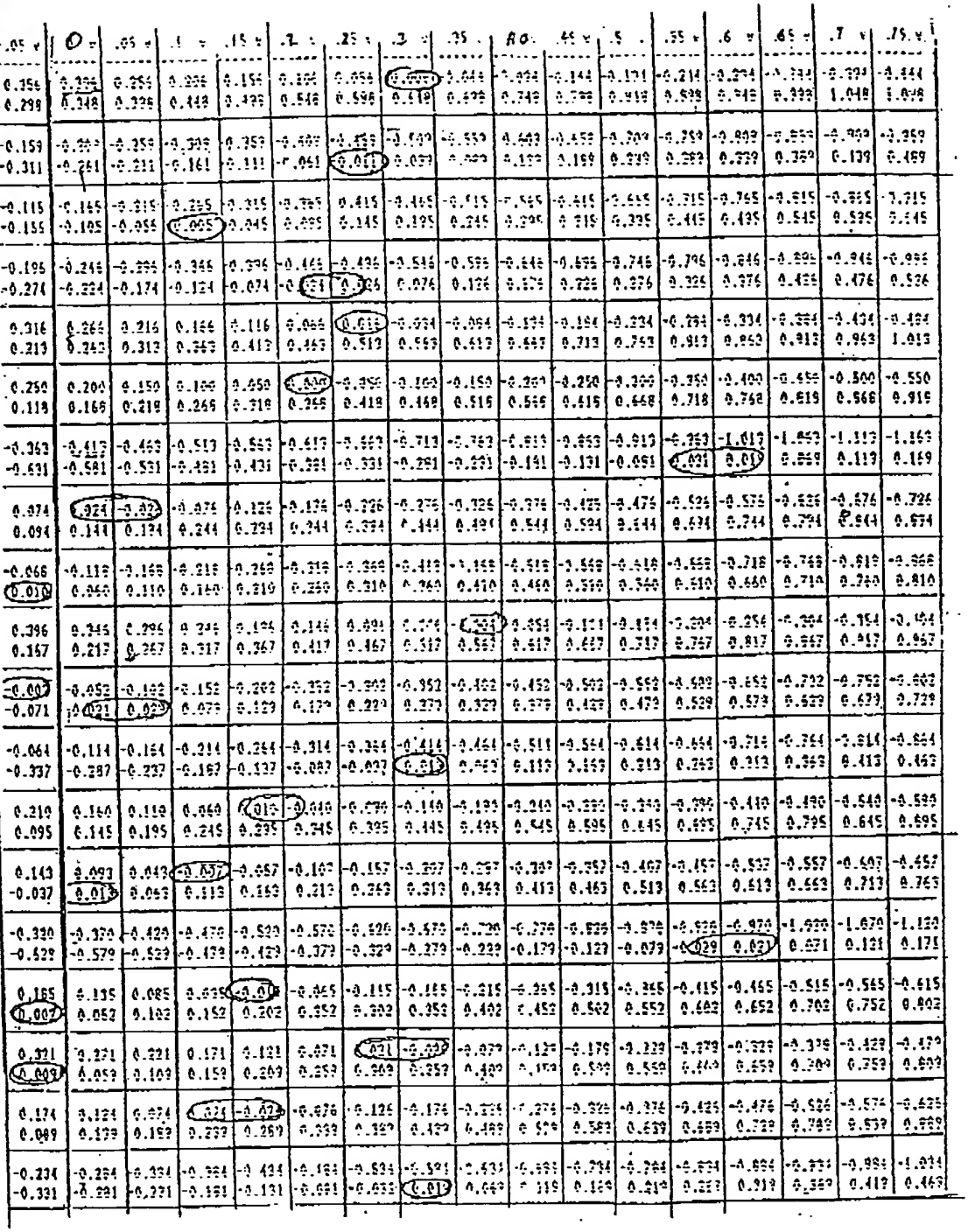


FIG 4(b)

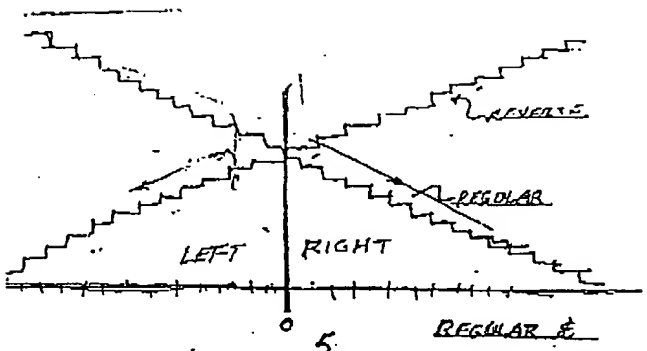
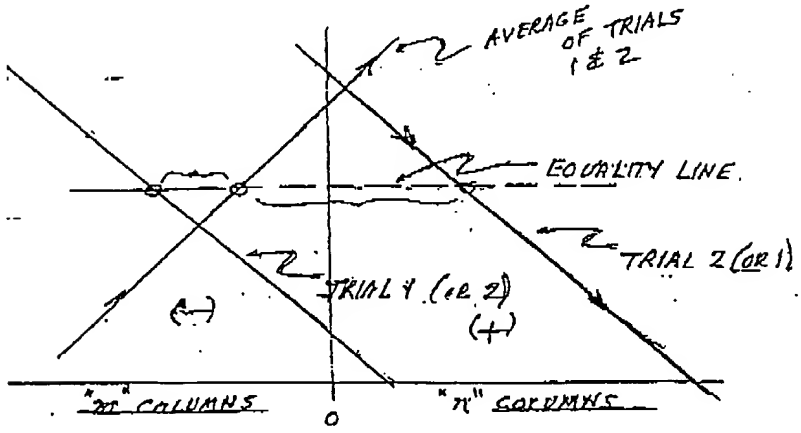


FIG 5 (a) REVERSE SCANS



& (b) COLUMN LOCATION

FIG 5 SCANNING "SENSE" REQUIREMENTS

I data ==== 0 dB ==== Group 1 Average I values *** Avgs scanned in opposite sense **

	Min IA	-.9 v	-.85 v	-.8 v	-.75 v	-.7 v	-.65 v	-.6 v	-.55 v	-.5 v	-.45 v	-.4 v	-.35 v	-.3 v	-.25 v	-.2 v	-.15 v	-.1 v
Avg 20B	0.041	2.431 0.672	2.381 0.722	2.331 0.772	2.281 0.822	2.231 0.872	2.181 0.922	2.131 0.972	2.081 1.022	2.031 1.072	1.981 1.122	1.931 1.172	1.881 1.222	1.831 1.272	1.781 1.322	1.731 1.372	1.681 1.422	1.631 1.472
Avg 21A	-0.052	1.916 0.064	1.866 0.114	1.816 0.164	1.766 0.214	1.716 0.264	1.666 0.314	1.616 0.364	1.566 0.414	1.516 0.464	1.466 0.514	1.416 0.564	1.366 0.614	1.316 0.664	1.266 0.714	1.216 0.764	1.166 0.814	1.116 0.864
Avg 22A	0.060	1.960 0.220	1.910 0.270	1.860 0.320	1.810 0.370	1.760 0.420	1.710 0.470	1.660 0.520	1.610 0.570	1.560 0.620	1.510 0.670	1.460 0.720	1.410 0.770	1.360 0.820	1.310 0.870	1.260 0.920	1.210 0.970	1.160 1.020
Avg 23A	0.022	1.878 0.101	1.828 0.151	1.778 0.201	1.728 0.251	1.678 0.301	1.628 0.351	1.578 0.401	1.528 0.451	1.478 0.501	1.428 0.551	1.378 0.601	1.328 0.651	1.278 0.701	1.228 0.751	1.178 0.801	1.128 0.851	1.078 0.901
Avg 24A	-0.002	2.390 0.588	2.340 0.638	2.290 0.688	2.240 0.738	2.190 0.788	2.140 0.838	2.090 0.888	2.040 0.938	1.990 0.988	1.940 1.038	1.890 1.088	1.840 1.138	1.790 1.188	1.740 1.238	1.690 1.288	1.640 1.338	1.590 1.388
Avg 25B	-0.032	2.325 0.493	2.275 0.543	2.225 0.593	2.175 0.643	2.125 0.693	2.075 0.743	2.025 0.793	1.975 0.843	1.925 0.893	1.875 0.943	1.825 0.993	1.775 1.043	1.725 1.093	1.675 1.143	1.625 1.193	1.575 1.243	1.525 1.293
Avg 26B	-0.169	1.712 0.257	1.662 0.207	1.612 0.157	1.562 0.107	1.512 0.057	1.462 0.007	1.412 0.043	1.362 0.093	1.312 0.143	1.262 0.193	1.212 0.243	1.162 0.293	1.112 0.343	1.062 0.393	1.012 0.443	0.962 0.493	0.912 0.543
Avg 27A	0.120	2.169 0.468	2.099 0.518	2.049 0.568	1.999 0.618	1.949 0.668	1.899 0.718	1.849 0.768	1.799 0.818	1.749 0.868	1.699 0.918	1.649 0.968	1.599 1.018	1.549 1.068	1.499 1.118	1.449 1.168	1.399 1.218	1.349 1.268
Avg 28C	0.178	2.007 0.385	1.957 0.435	1.907 0.485	1.857 0.535	1.807 0.585	1.757 0.635	1.707 0.685	1.657 0.735	1.607 0.785	1.557 0.835	1.507 0.885	1.457 0.935	1.407 0.985	1.357 1.035	1.307 1.085	1.257 1.135	1.207 1.185
Avg 29C	-0.129	2.471 0.542	2.421 0.592	2.371 0.642	2.321 0.692	2.271 0.742	2.221 0.792	2.171 0.842	2.121 0.892	2.071 0.942	2.021 0.992	1.971 1.042	1.921 1.092	1.871 1.142	1.821 1.192	1.771 1.242	1.721 1.292	1.671 1.342
Avg 30B	0.032	2.073 0.304	2.023 0.354	1.973 0.404	1.923 0.454	1.873 0.504	1.823 0.554	1.773 0.604	1.723 0.654	1.673 0.704	1.623 0.754	1.573 0.804	1.523 0.854	1.473 0.904	1.423 0.954	1.373 1.004	1.323 1.054	1.273 1.104
Avg 31C	-0.174	2.011 0.037	1.961 0.087	1.911 0.137	1.861 0.187	1.811 0.237	1.761 0.287	1.711 0.337	1.661 0.387	1.611 0.437	1.561 0.487	1.511 0.537	1.461 0.587	1.411 0.637	1.361 0.687	1.311 0.737	1.261 0.787	1.211 0.837
Avg 32C	-0.015	2.285 0.470	2.235 0.520	2.185 0.570	2.135 0.620	2.085 0.670	2.035 0.720	1.985 0.770	1.935 0.820	1.885 0.870	1.835 0.920	1.785 0.970	1.735 1.020	1.685 1.070	1.635 1.120	1.585 1.170	1.535 1.220	1.485 1.270
Avg 33C	-0.080	2.219 0.338	2.169 0.388	2.119 0.438	2.069 0.488	2.019 0.538	1.969 0.588	1.919 0.638	1.869 0.688	1.819 0.738	1.769 0.788	1.719 0.838	1.669 0.888	1.619 0.938	1.569 0.988	1.519 1.038	1.469 1.088	1.419 1.138
Avg 34A	-0.209	1.755 -0.255	1.705 -0.205	1.655 -0.155	1.605 -0.105	1.555 -0.055	1.505 -0.005	1.455 0.045	1.405 0.095	1.355 0.145	1.305 0.195	1.255 0.245	1.205 0.295	1.155 0.345	1.105 0.395	1.055 0.445	1.005 0.495	0.955 0.545
Avg 35C	-0.083	2.260 0.377	2.210 0.427	2.160 0.477	2.110 0.527	2.060 0.577	2.010 0.627	1.960 0.677	1.910 0.727	1.860 0.777	1.810 0.827	1.760 0.877	1.710 0.927	1.660 0.977	1.610 1.027	1.560 1.077	1.510 1.127	1.460 1.177
Avg 36B	-0.252	2.396 0.294	2.346 0.344	2.296 0.394	2.246 0.444	2.196 0.494	2.146 0.544	2.096 0.594	2.046 0.644	1.996 0.694	1.946 0.744	1.896 0.794	1.846 0.844	1.796 0.894	1.746 0.944	1.696 0.994	1.646 1.044	1.596 1.094
Avg 37C	0.015	2.249 0.463	2.199 0.513	2.149 0.563	2.099 0.613	2.049 0.663	1.999 0.713	1.949 0.763	1.899 0.813	1.849 0.863	1.799 0.913	1.749 0.963	1.699 1.013	1.649 1.063	1.599 1.113	1.549 1.163	1.499 1.213	1.449 1.263
Avg 38B	0.003	1.841 0.044	1.791 0.094	1.741 0.144	1.691 0.194	1.641 0.244	1.591 0.294	1.541 0.344	1.491 0.394	1.441 0.444	1.391 0.494	1.341 0.544	1.291 0.594	1.241 0.644	1.191 0.694	1.141 0.744	1.091 0.794	1.041 0.844

Fig 8(a)

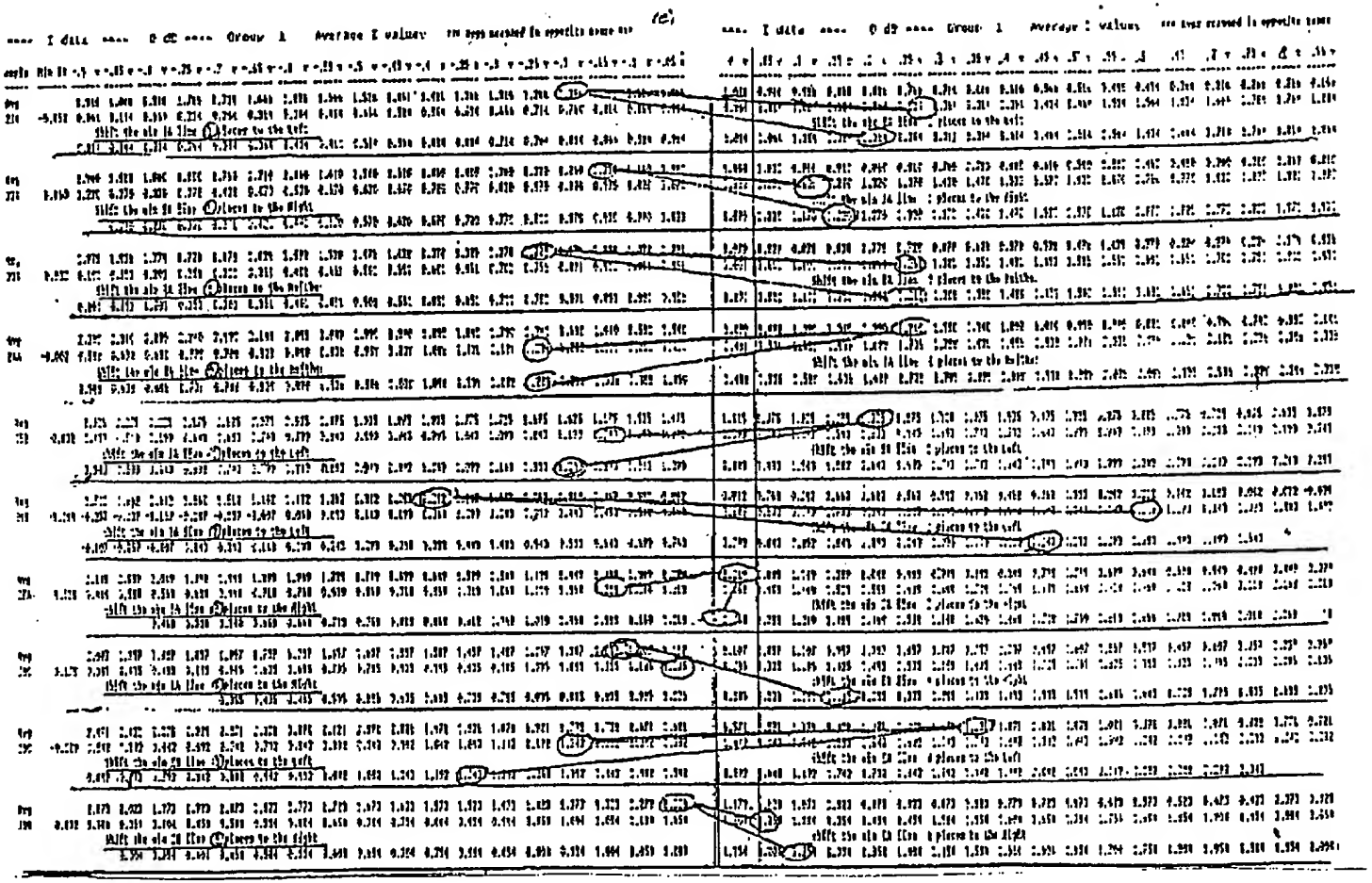
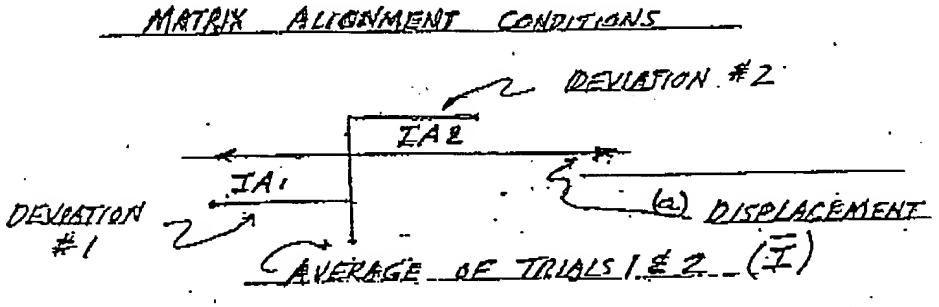


FIG 7 TOPOLOGICAL CHANGE SENSOR (IN EQUILIBRIUM)

FIGURE 8 TABLE OF INITIAL CONDITIONS & INSTURCTIONS

Initial Conditions – (Iteration Zero)

USE FIGURE 7 AS A TYPOLOGICAL NUMBER ARRAY, WHICH HAS BEEN PLACED IN EQUILIBRIUM BY THE COLUMNS SHIFTING FUNCTIONING OF THE DEVIATIONS SHOWN BELOW (SO AS TO MAKE IT A "CHANGE SENSOR").



. NOTE THAT: AVERAGE I = I signal + I average noise

ROW OF MINIMUM ABSOLUTE DEVIATION: I signal = I noise closet to Av noise

AMOUNT OF DEVIATION = | IA | of the ± polarity

OF EQUIVALENT COLUMN SHIFT = | IA | ÷ COLUMN SPACING

To start the iterative process note the entry of the signal-plus-noise in the zero column as the starting reference.

Obtain a numerical match of the entry value in the particular column in the second row which matches that in the O column. The column match will occur in either the right or left section.

NOTE: ENTRIES ARE ENTERED IN THE "AVERAGE ROW" COLUMN IN A SEQUENCE OPPOSITE THAT OF THE OTHER ROW

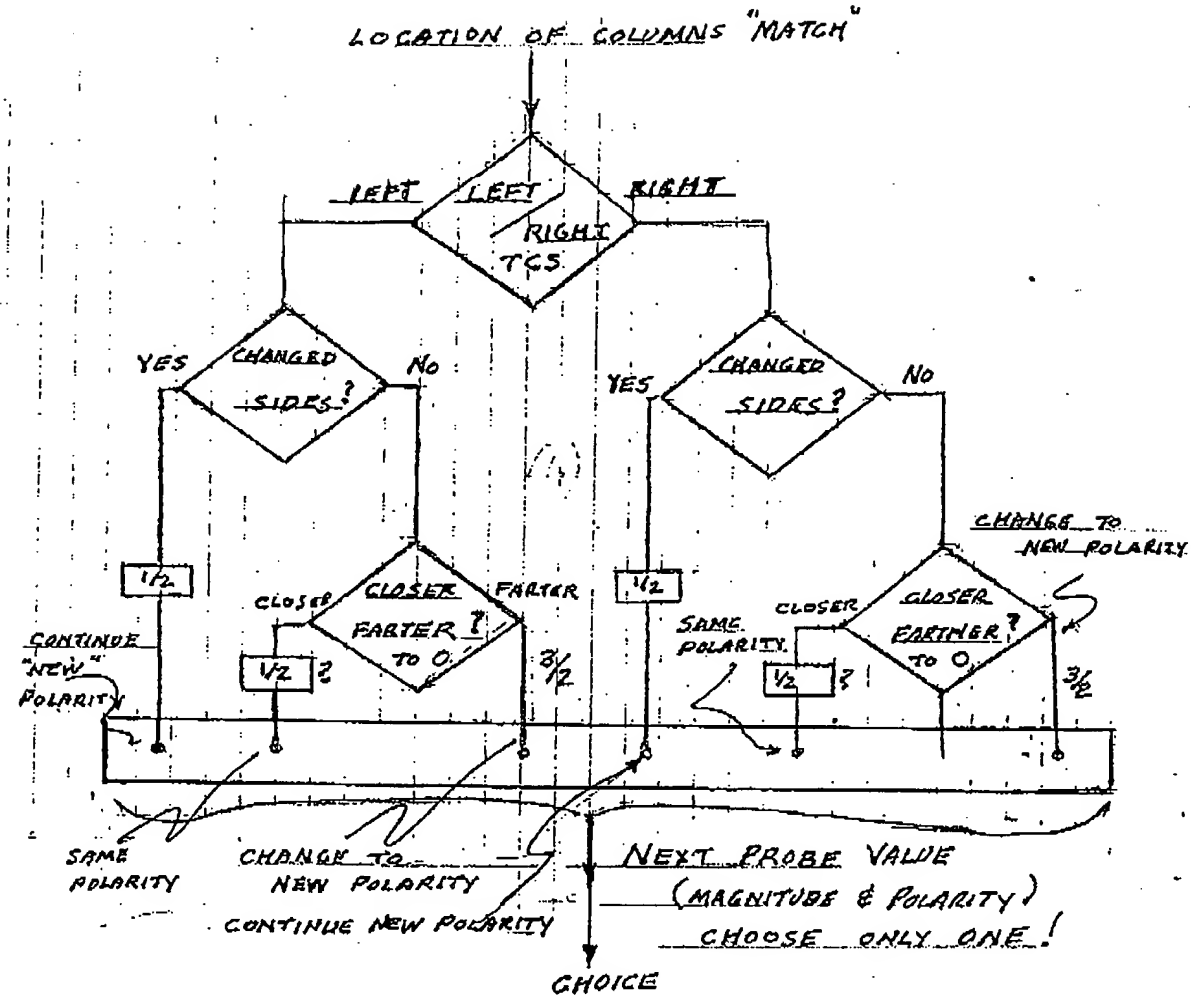


FIG 9 SELECTION LOGIC FOR NEXT ITERATIVE PROBE

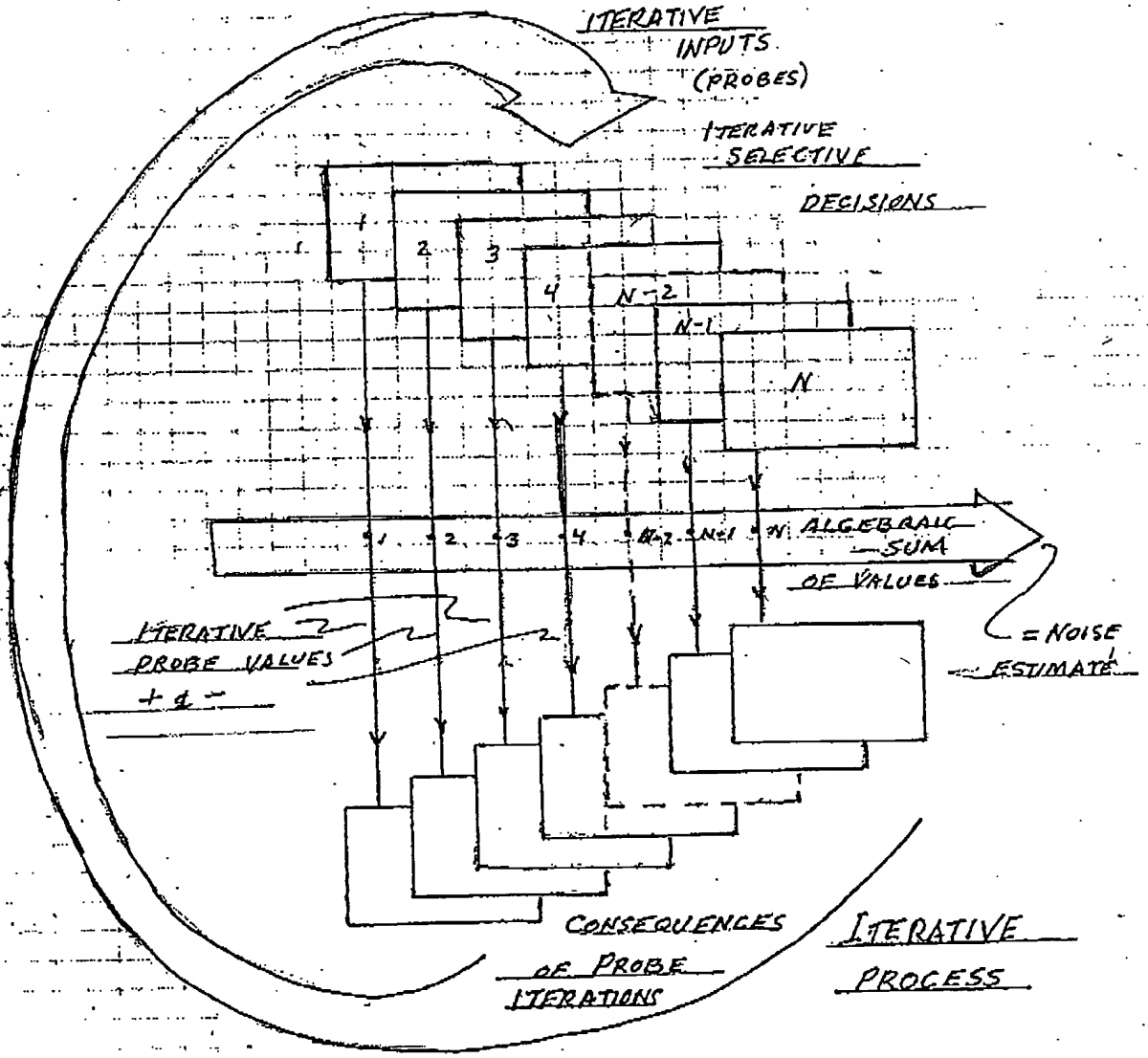


FIG 10 ITERATIVE PROCESS

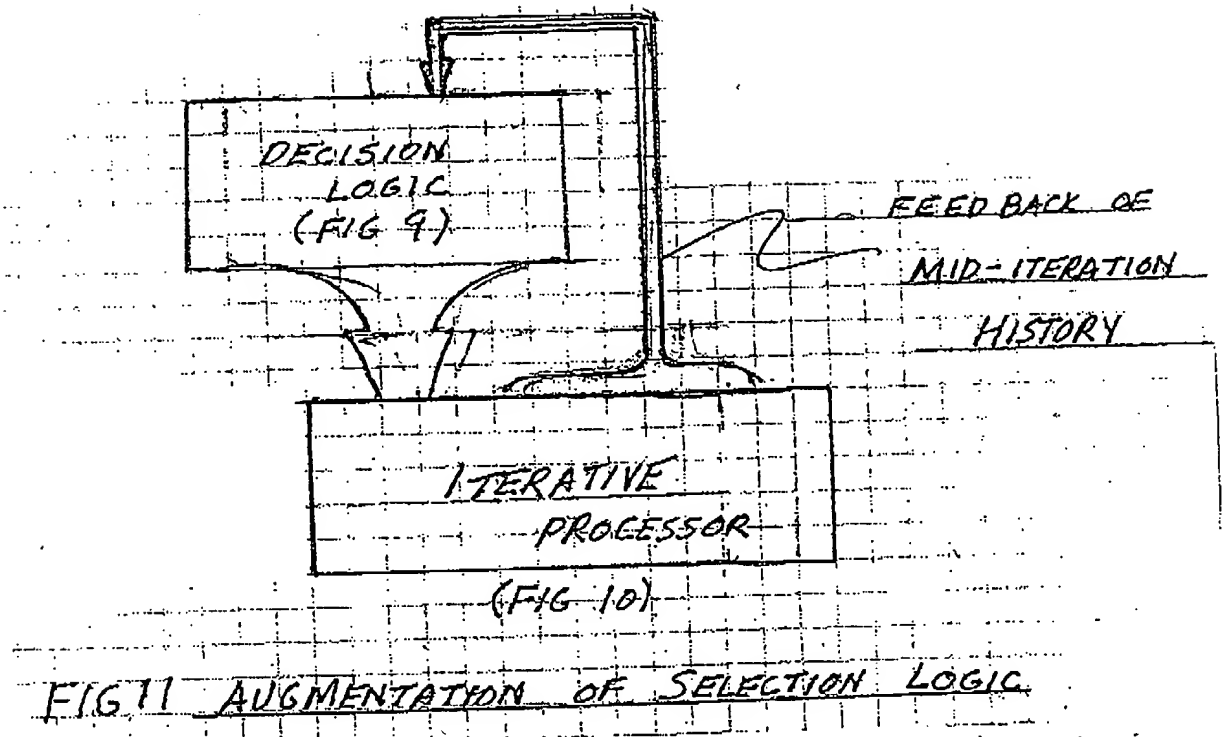


FIG 11 AUGMENTATION OF SELECTION LOGIC

D0656560.000000

RANDOM I data

Trial Group		Orig Noise Avg	New Noise Averages 1	2	3	4	5	Equiv Voltage Added	Last Noise Avg	Ratio Orig / Last
205	1	0.1481	0.0e4e	-0.1314	0.0e4e	-0.02e1	0.0081	-0.1755	-0.0e52	2.9
205	2	0.5426	0.3062	0.1162	-0.1e56	-0.0048	0.0533	-0.2601	0.02e2	24.2
205	3	0.6213	0.5902	0.2502	0.0002	-0.1246	-0.0e23	-0.e524	-0.0911	20.0
206	1	-0.2508	-0.0508	0.1942	-0.0596	0.0242	0.0117	-0.2313	-0.0176	12.e
206	2	0.1813	-0.1142	0.1558	-0.1142	0.0106	-0.0317	-0.2017	-0.0295	6.9
206	3	-0.4060	-0.31e5	-0.0ee5	0.1622	0.0585	-0.0040	0.4352	0.0272	14.9
20e	3	-0.2893	-0.0300	0.2200	-0.0300	0.0950	0.0225	0.2906	0.0013	224.5
207	1	-0.0591	0.12e6	-0.1232	0.12e6	0.0018	-0.0e0?	0.0296	-0.0295	2.0
207	2	0.6018	0.7704	0.5404	0.2904	0.1e54	0.1024	-0.7300	0.0716	11.2
207	3	-0.3249	-0.1255	0.1245	-0.1255	-0.0605	0.0e20	0.3577	0.0306	10.e
208	1	-0.5692	-0.4028	-0.3026	0.0472	-0.0278	-0.0153	0.e052	0.0160	5e.9
208	2	-0.5162	-0.3509	-0.1007	0.1471	0.0241	-0.0364	0.5095	-0.0071	72.4
208	3	-0.3339	-0.2515	0.0186	-0.2915	-0.1ee5	-0.0e40	0.3200	-0.0128	26.1
209	1	0.7863	0.628e	0.376e	0.1226	0.0038	-0.0589	-0.61e0	-0.0277	2e.9
209	2	-0.3146	-0.1996	0.0504	-0.1996	-0.074e	-0.0121	0.3398	0.0152	1e.4
209	3	-0.4353	-0.2432	0.00ee	-0.2e62	-0.1182	-0.0557	0.4109	-0.0244	17.e
210	1	-0.1064	0.1e3e	-0.1ee0	0.1552	0.0e82	-0.0548	0.0836	-0.0230	4.e
210	2	0.2597	0.0857	-0.1e2e	0.0257	-0.0e92	-0.03e6	-0.2e52	-0.0355	46.7
210	3	-0.2477	-0.0e20	0.2250	-0.0ee0	0.1030	0.0405	0.2557	0.0028	26.7
211	1	-0.2273	-0.2128	0.05e1	-0.21ee	-0.0006	-0.0263	0.2327	0.0004	46.0
211	2	0.0775	0.53ee	0.2ee0	0.03ee	-0.0304	0.0241	-0.e7e7	0.0005	820.7
211	3	0.1145	-0.2e2d	0.0197	-0.2e2e	-0.1e75	-0.0e40	-0.1220	-0.0136	8.4
212	1	0.3209	0.2e0d	0.0092	-0.2e95	-0.1e47	-0.0e22	-0.3916	-0.0209	15.4
212	2	0.2595	0.2157	-0.0241	0.2159	0.0e06	0.0284	-0.2214	-0.0047	70.1
212	3	0.4217	0.2e21	-0.0279	0.2221	0.0971	0.0e1e	-0.4182	0.0054	122.e
213	1	-0.5357	-0.3012	-0.0512	0.1500	0.0436	0.0116	0.5137	-0.0177	2e.7
213	2	-0.2943	-0.2748	-0.0248	0.2e22	0.1002	0.0e27	0.3008	0.0065	45.e
213	3	-0.6963	-0.5029	-0.2529	-0.0027	0.1221	0.05ee	0.7267	0.0405	17.e
214	1	0.7664	0.7016	0.4816	0.2016	0.0766	0.0141	-0.78ee	-0.0171	44.7
214	2	0.3609	0.2261	-0.0219	0.2e81	0.1031	0.0e0e	-0.3e1e	0.0093	38.7
214	3	-0.5990	-0.3920	-0.1e20	0.1030	-0.0170	0.0455	0.6132	0.0142	42.1
215	1	-0.6418	-0.61e9	-0.3e69	-0.11e9	0.0081	-0.0544	0.6187	-0.0231	27.8
215	2	-0.2020	-0.016e	0.2334	-0.016e	0.1086	0.0e55	0.21ee	0.0146	13.8
215	3	0.2267	-0.0009	0.2491	-0.0004	0.1241	0.0616	-0.1964	0.0305	7.5
21e	1	-0.7869	-0.7e07	-0.5107	-0.2607	-0.1357	-0.0732	0.7450	-0.0419	18.8
216	2	-0.3518	-0.0974	0.150e	-0.0994	0.0256	-0.03e4	0.3422	-0.0057	e1.7
216	3	-0.3168	-0.0968	0.1532	-0.0968	0.0282	-0.0343	0.3138	-0.0031	103.9
217	1	0.2848	0.3126	0.0426	-0.1674	-0.0624	0.0091	-0.41e0	-0.0312	12.3
217	2	0.3492	0.2517	0.0017	-0.2485	-0.1233	-0.0608	-0.3788	-0.0256	11.8
217	3	0.2194	0.0254	-0.2246	0.0294	-0.0996	-0.0371	-0.2253	-0.0059	37.2
218	1	-0.6434	-0.5996	-0.3498	-0.0998	0.0252	-0.0373	0.6373	-0.0061	106.0
218	2	0.2516	0.1355	-0.1146	0.1555	0.0105	-0.0520	-0.2724	-0.0207	12.1
218	3	-0.6197	-0.5113	-0.2e15	-0.0115	0.1137	0.0512	0.6596	0.0200	41.1
219	1	-0.1859	0.0141	-0.e459	0.0141	-0.1109	-0.04e4	0.1668	-0.0172	10.e
219	2	-0.2779	-0.1251	0.1269	-0.1251	0.0019	-0.0ece	0.2468	-0.0294	9.5
219	3	-0.2246	-0.07be	0.1744	-0.0e5e	0.0e2e	-0.0141	0.2582	0.0181	12.4
220	1	-0.2729	-0.1e05	0.0791	-0.1e09	-0.0e1e	0.0146	0.27e3	-0.0071	9.e
220	2	-0.0854	-0.0e04	0.2092	-0.0ee1	0.0e1e	0.0521	0.3ee0	0.00e3	5e.8
220	3	-0.3921	-0.2118	0.0382	-0.2116	-0.0e66	-0.0e45	-0.0e2e	0.0eee	13.2
221	1	0.8987	0.7e32	0.4552	0.2e52	0.1eee	0.0e66	-0.4ee6	0.00e8	5e.0
221	2	-0.3518	-0.1e70	-0.0670	0.1eee	0.0e66	-0.0e4e	0.4ee6		
221	3									

ORIGINAL NOISE

RESULT OF EACH OF 1ST FIVE (OF SIX ITERATIONS)

THIS COLUMN YIELDS "ESTIMATE" NOISE (SUM OF VALUES ADDED)

RESIDUAL NOISE

VOLTAGE RATIO

FIG 12 (a)

RAHMAN Q data

Trial/ Group		Orig Noise Avg	New Noise Average 1	2	3	4	5	Equiv Voltage Added	Last Noise Avg	Ratio Orig : Last
205	1	0.4440	0.3970	0.1470	-0.1030	0.0220	-0.0405	-0.4532	-0.0092	48.1
205	2	0.1928	0.0077	-0.2423	0.0077	-0.1173	-0.0548	-0.2163	-0.0235	8.2
205	3	0.2307	0.0107	-0.2193	0.0507	-0.0943	-0.0318	-0.2313	-0.0006	392.9
206	1	0.6667	0.5649	0.3149	0.0649	-0.0601	0.0024	-0.6955	-0.0289	23.1
206	2	-0.0959	0.1153	-0.134.	0.1153	-0.0097	0.0528	0.1174	0.0215	4.5
206	3	0.0218	-0.2565	-0.0065	0.2435	0.1185	0.0560	0.0030	0.0248	0.9
207	1	0.7412	0.7194	0.4694	0.2194	0.0944	0.0319	-0.7406	0.0006	1181.1
207	2	-0.2978	-0.2522	-0.0022	0.2478	0.1228	0.0603	0.3263	0.0290	10.2
207	3	0.3631	-0.0517	0.1983	-0.0517	0.0732	0.0108	-0.4034	-0.0205	18.7
208	1	0.2199	0.1728	-0.0772	0.1728	0.0478	-0.0147	-0.2033	0.0166	13.3
208	2	0.4198	0.3966	0.1466	-0.1034	0.0216	-0.0409	-0.4295	-0.0097	43.4
208	3	-0.1523	-0.0900	0.1600	-0.0900	0.0350	-0.0275	0.1561	0.0038	40.1
209	1	-0.3083	-0.2665	-0.0165	0.2315	0.1065	0.0440	0.3161	0.0127	23.8
209	2	-0.0802	0.0528	-0.1972	0.0528	-0.0722	-0.0097	0.1024	0.0216	3.7
209	3	-0.0148	0.1385	-0.1115	0.1385	0.0135	-0.0490	-0.0029	-0.0177	0.8
210	1	0.2507	0.1407	-0.0693	0.1607	0.0357	-0.0268	-0.2462	0.0044	56.8
210	2	0.2447	0.2049	-0.0451	0.2049	0.0799	0.0174	-0.2544	-0.0139	17.5
210	3	0.0961	-0.0741	0.1739	-0.0741	0.0489	-0.0134	-0.0784	0.0177	5.4
211	1	0.2259	0.2232	-0.0268	0.2232	0.0982	0.0357	-0.2325	0.0044	53.5
211	2	0.4865	0.2584	0.0084	-0.2416	-0.1216	-0.0591	-0.5143	-0.0278	17.5
211	3	-0.7412	-0.7024	-0.4524	-0.2039	-0.0729	-0.0164	0.7360	0.0148	50.1
212	1	0.5285	0.3926	0.1426	-0.1074	0.0176	-0.0449	-0.5421	-0.0136	38.8
212	2	0.1817	0.0830	-0.1670	0.0830	-0.0420	0.0205	-0.1925	-0.0107	16.9
212	3	-0.0208	0.1420	-0.1080	0.1420	0.0170	-0.0455	0.0056	-0.0142	1.5
213	1	-0.2570	-0.1452	0.0848	-0.1452	-0.0402	0.0223	0.2480	-0.0090	28.7
213	2	-0.0064	0.0310	-0.2190	0.0310	-0.0940	-0.0315	0.0062	-0.0003	24.3
213	3	-0.5096	-0.3200	-0.0700	0.1800	0.0550	-0.0075	0.5333	0.0237	21.5
214	1	-0.0246	0.1703	-0.0797	0.1703	0.0453	-0.0172	0.0287	0.0141	1.8
214	2	-0.1595	-0.0912	0.1588	-0.0912	0.0328	-0.0286	0.1620	0.0025	62.8
214	3	0.1216	-0.0494	0.2006	-0.0494	0.0756	0.0131	-0.1398	-0.0181	6.7
215	1	-0.3403	-0.0213	0.2287	-0.0213	0.1037	0.0412	0.3502	0.0099	34.3
215	2	-0.1557	-0.0243	0.2257	-0.0243	0.1007	0.0382	0.1627	0.0069	22.4
215	3	-0.5943	-0.3037	-0.0537	0.1963	0.0713	0.0088	0.5718	-0.0225	26.5
216	1	0.1584	0.0262	-0.2218	0.0262	-0.0968	-0.0343	-0.1614	-0.0030	52.0
216	2	0.3981	0.3764	0.1274	-0.1236	0.0044	-0.0581	-0.4250	-0.0268	14.8
216	3	0.1159	-0.0841	0.1459	-0.0841	0.0409	-0.0216	-0.1063	0.0097	12.0
217	1	0.4497	0.2497	-0.0003	0.2497	0.1247	0.0622	-0.4188	0.0309	14.5
217	2	0.5273	0.2169	-0.0331	0.2169	0.0919	0.0294	-0.5292	-0.0019	278.7
217	3	0.1066	-0.0700	0.1800	-0.0700	0.0550	-0.0075	-0.0829	0.0238	4.5
218	1	-0.4485	-0.2822	-0.0322	0.2178	0.0928	0.0303	0.4475	-0.0010	453.7
218	2	0.0983	-0.1447	0.1053	-0.1447	-0.0197	0.0428	-0.0867	0.0115	8.5
218	3	0.0171	-0.1190	0.1310	-0.1190	0.0060	-0.0565	-0.0423	-0.0252	0.7
219	1	0.0508	-0.1111	0.1389	-0.1111	0.0139	-0.0486	-0.0681	-0.0173	2.9
219	2	0.2668	0.0668	-0.1832	0.0668	-0.0582	0.0043	-0.2938	-0.0270	9.9
219	3	-0.2792	-0.1891	0.0609	-0.1891	-0.0641	-0.0016	0.3088	0.0296	9.4
220	1	0.6507	0.6095	0.3595	0.1095	-0.0155	0.0470	-0.6349	0.0158	41.2
220	2	0.6334	0.2617	0.1117	-0.1383	-0.0142	0.0485	-0.6157	0.0179	35.4
220	3	-0.1340	0.1748	-0.0752	0.1748	0.0498	-0.0127	0.1565	0.0185	7.2
221	1	-0.3141	-0.1141	0.1259	-0.1141	0.0109	-0.0516	0.2938	-0.0204	15.4
221	2	-0.0550	0.1447	-0.1053	0.1447	0.0197	-0.0428	0.0285	-0.0114	3.0
221	3	0.1095	-0.1367	0.1147	-0.1367	-0.0117	0.0500	-0.0979	0.0196	5.3

12(6)